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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/661,479	09/15/2003	Ramon M. Navarro		9231

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BRENEMAN & GEORGES
William D. Breneman, Esq.
3150 Commonwealth Avenue
Alexandria, VA 22305

EXAMINER

KHAIRA, NAVNEET K

ART UNIT	PAPER NUMBER
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3754

DATE MAILED: 12/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/661,479	Applicant(s) NAVARRO, RAMON M.	
	Examiner Navneet Sonia Khaira	Art Unit 3754	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on August 18, 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. Claims 1, 14, 15, and 20 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which needs to be described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Detailed description of the stop means is requested. Is 50 fixed? Does the regulator close the inlet completely? Is 45 still adjustable once the stop means 51 rests on 43? Do 50 and 51 actually act as stop means for the regulator.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-10, 13-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Edwards et al (US 6,338,370) in view of Byrd et al (US 3,865,281).

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Referring to claims 1,13,14, and 20, Edwards et al discloses a sanitary fill valve assembly comprising:

a housing (12) having an inlet passage (24B and 24C) for receiving a viscous flowable material from a viscous flowable material source, an annular chamber (14) for receiving the viscous flowable material from the inlet passage (24B and 24C), and an outlet passage (38) from which the viscous flowable material is dispensed;

an ON/OFF (18, col 13) positive controlled product dispenser for dispensing the viscous flowable material from the chamber;

pneumatically (col 4, line 15) operating product dispenser (col 2, lines 54-57) to reciprocate said product dispenser between a first position opening said chamber and second position closing said chamber to permit dispensing of the liquid product (col 4, lines 15-16).

Edwards et al does not discloses a product flow regulator extending substantially perpendicular relative to said product dispenser, said inlet passage and said outlet passage for adjustably regulating the rate of flow of the viscous flowable material into the chamber. Byrd et al discloses a product flow regulator (250, fig 11) for adjustably regulating the rate of flow (by up/down movement) of the viscous flowable material into the chamber (228, fig 11), the flow regulator (250) being disposed in a flow path (from inlet 218 to outlet 234) between the inlet passage (218) and the annular chamber of said housing.

It would have been obvious to have modified the dispenser of Edwards et al with the flow regulator of Byrd et al in order to control the flow rate of the fluid into the

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dispensing chamber as taught by Byrd. It would have been further obvious to position the regulator perpendicular to the inlet and outlet passages if desired by the manufacturer in order to dispense the product.

Referring to claim 2, Edwards et al further discloses product dispenser comprises a piston (16, fig 2) cylinder.

Referring to claim 3, Edwards et al further discloses a piston cylinder (16, fig 2) includes a main piston body (wide, upper portion of 16) and a piston head (lower, tip end of piston) disposed at a distal end thereof for dispensing the viscous flowable product from the chamber.

Referring to claim 4, Edwards et al further discloses an annular surface of the housing has a tapered wall adjacent the outlet passage forming a seat for the main piston body.

Referring to claim 5, Edwards et al further discloses a seal mechanism (20) for positively sealing the piston cylinder (16, fig 1) in the chamber.

Referring to claim 6, Edwards et al further discloses seal mechanism comprises a first seal member (20 E-F, fig 1), a second seal (20D) member and a third seal member (20C).

Referring to claim 7, Edwards et al further discloses a first seal member (20 E-F, fig 1) is disposed on the piston head for cleaning-in-place (seal members below surface 34, fig 1) the outlet passage to prevent dripping of the viscous flowable product during dispensation, the second sealing member (20D, fig 1) being disposed intermediate the main piston body and the piston head for positively shutting off (fig 2) flow of the viscous liquid product during dispensation, and the third seal (20C) member being disposed adjacent the main piston body (16) for preventing fluid leakage (fig 2).

Referring to claim 8, Edwards et al further discloses a drive mechanism (plunger 18, col 3 line 36) for actuating the piston cylinder (16, fig 1).

Referring to claim 9, Edwards et al further discloses a drive mechanism comprises a pneumatic cylinder (col 4, line 15).

Referring to claim 10, Edwards et al further discloses a dispenser but does not disclose a product flow regulator in which a downward position decreasing the flow area into the chamber and an upward position increasing the flow area into the chamber first stop means and second stop means for limiting the displacement of said product flow regulator. Byrd et al discloses a product flow regulator (250) comprises a regulator body (rod- 256) and an adjustment mechanism (cam –col 9, lines 16-19) for selectively displacing the regulator body (250) within the housing between a downward position (fig

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12) decreasing the flow area (blocking dispensing opening 226) into the chamber and an upward position (fig 11) increasing the flow area (not blocking dispensing opening 226) into the chamber.

It would have been obvious to one of ordinary skill in the art to have modified the dispenser of Edwards et al by including the flow regulator of Byrd in order to adjust the flow rate at which the fluid will be dispensed.

Referring to claims 15 and 19, Edwards et al discloses a valve for accommodating viscous flowable materials having different physical properties, and sanitary fill valve comprising:

a valve housing (12, fig 2) having an inlet passage (24B, 24C) for receiving a viscous flowable material from a viscous flowable material source, an annular chamber (12,14) in communication with the inlet passage (24B, 24C), and an outlet passage (38) in communication with the chamber (14) for dispensing the viscous flowable material;

a product dispenser disposed within the annular chamber (12) for drawing the viscous flowable material into the chamber and dispensing the viscous flowable material from the chamber (col 2, lines 24-26);

a sealing mechanism (20) for positively sealing the product dispenser within the chamber (12), wherein the seal mechanism (20) is also adapted to facilitate outlet passage (38) during dispensation of the viscous cleaning-in-place (col 1, lines 41-45) of the flowable material;

Edwards et al further discloses a dispenser but does not disclose a product flow regulator wherein said product flow regulator is positioned in said valve housing such that it reciprocates in directions substantially perpendicular to said product dispenser, said inlet passage and said outlet passage in which a downward position decreasing the flow area into the chamber and an upward position increasing the flow area into the chamber. Byrd et al discloses a product flow regulator (250) comprises a regulator body (rod- 256) and an adjustment mechanism (cam –col 9, lines 16-19) for selectively displacing the regulator body (250) within the housing between a downward position (fig 12) decreasing the flow area (blocking dispensing opening 226) into the chamber and an upward position (fig 11) increasing the flow area (not blocking dispensing opening 226) into the chamber.

It would have been obvious to one of ordinary skill in the art to have modified the dispenser of Edwards et al by including the flow regulator of Byrd in order to adjust the flow rate at which the fluid will be dispensed. It would have been further obvious to one of ordinary skill in the art to change the positioning of the regulator with respect to the inlet and outlet passages in any direction in order to dispense a product as taught by Edwards.

Referring to claim 16, Edwards et al further disclose the product dispenser (fig 1) comprises a piston cylinder (16) having a main piston body (surface on which 16 points) and a piston head (surface on which 34 points) disposed at a distal end (by opening 38) for dispensing the viscous flowable material from the chamber.

Referring to claim 17, Edwards et al further discloses a piston head (end of 16, towards the opening) is provided with a pair of channels (col 3, lines 64) on an outer circumferential surface for receiving a pair of seal members (above 38, each seal member is retained within a channel).

Referring to claim 18, Edwards et al further discloses wherein each of the seal members comprises an O-ring (col 3, line 39).

Referring to claim 21, Edwards et al further discloses a seal mechanism for cleaning-in place the chamber during the dispensing step (col 1, lines 41-45).

4. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Edwards et al (US 6,338,370) in view of Byrd et al (US 3,865,281) as applied to claim 8 and further in view of Pankratz et al (US 4,437,498).

Referring to claims 11, the modified Edwards et al and Byrd et al further discloses a dispenser and a cam assembly which lowers or raises the rod which regulates the flow but does not disclose the adjustment mechanism comprises a threaded screw and an adjustment nut. Pankratz et al discloses a hand-wheel 140 has internal threads which engage the external threads on threaded portion (col 7, lines 5-10).

It would have been obvious to one of ordinary skill in the art to replace the cam assembly of the modified Edwards et al with a nut and bolt assembly of Pankratz in order to adjust the elongate regulator body as taught by Pankratz.

5. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Edwards et al (US 6,338,370) in view of Byrd et al (US 3,865,281) as applied to claim 8 and further in view of Cavallaro (US 5,957,343).

Referring to claim 12, the modified Edwards et al further discloses a dispenser and a cam assembly which lowers or raises the rod which regulates the flow but does not disclose the adjustment mechanism is an electric actuator. Cavallaro discloses a material control device is connected to a standard power control system which cooperates with the adjustment mechanism. It would have been obvious to one of ordinary skill in the art to have a power control system of Cavallaro connected to the adjustment mechanism of the modified Edwards et al in order to control the distance of displacement electronically as taught by Cavallaro.

Citation of Related Prior Art

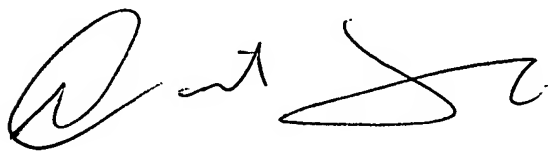
6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Cavallaro et al (US 6,085,943) and Nichols et al (US 5,137,187) references also disclosed apparatuses for fill dispensers.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Navneet Sonia Khaira whose telephone number is 571-272-7142. The examiner can normally be reached on 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mar Y. Michael can be reached on 571-272-4906. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Navneet Sonia Khaira
Examiner
Art Unit 3754

NK



MICHAEL MAR
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700